

with great benefit be established; and I hope the moving spirits will be found, to carry it into effect, as a means, not only of the advance of our beautiful Art in the present generation, but also (it may be said without hesitancy) of its regeneration from its present obscurity, confusion, disguise, and error, to its true free height as one of the noblest works of the intellect of man.

THE BOND QUESTION.

SIR,—Will you allow me space in your publication to add a few words on the subject of bond in brickwork, so that your readers may have more views than one before them? In my humble opinion it should be laid down as a fundamental principle, that "no woodwork, either in the shape of bond, plates, or lintels, should be used in brickwork, and that wood bricks and the ends of timbers should be admitted as seldom as possible."

In order to supply the place of wood, I would adopt one or more of the following expedients:—

For Bond.

1. The brickwork should be carried up in English bond, in party-walls at least.
2. Two or more courses of stone or slate, set in cement, all the joints broken; this would apply particularly to ashlar, and might receive the form of stringing courses.
3. Four or more courses of iron-hoop or vat-hoop. It should be an invariable rule, whenever iron is used, either to have it galvanized, painted, pitched and sanded, or coated by one of the processes you have mentioned in recent numbers of THE BUILDER.
4. Two or three courses of tiles somewhat after the Roman manner, but bedded in cement and the joints broken. The tiles might be made of the width of the wall, of any convenient length,—say from 2 to 3 feet, and from 1 to 2 inches in thickness. Perhaps these might be objected to in the front walls of buildings, but at any rate they might be used in the party-walls, or they might be moulded on as to form stringing courses, in the same manner as the stone or slate bond, and in that case might be made very ornamental.
5. Two or more courses of bricks formed in lengths of 2 to 3 feet, and the whole width of the wall. These, if bedded in cement and with all the joints broken, would form a very efficient bond.

For Plates.

1. Iron vat-hooping or iron bars (galvanized) to which the ends of the timbers might be screwed or spiked.*
2. Cast-iron corbel plates, on which the wooden plates would rest.

For Lintels.

1. The arches over the external door and window openings might be formed the whole thickness of the wall, in which case no lintels would be required.
2. Wherever lintels were required, bars of iron (galvanized) might be used with discharging arches over them.

For Wood Bricks.

I think I have seen it stated either in THE BUILDER or some other publication (but perhaps you or some of your correspondents can refresh my memory on that point), that an incombustible substance had been invented which might be very usefully applied in the place of wood bricks, being capable of resisting pressure, and possessing the nature of wood, inasmuch as nails might be driven into it without splitting it.

Ends of Timbers.

The use of cast-iron corbels for supporting the plates would get over this difficulty, and a very good tie might be obtained.

I have not said anything on the advantages of excluding a substance that is liable to decay and fire from brick and stone walls, considering it a self-evident proposition.

I am, Sir, &c.,

A BUILDER.

London, Feb. 4th, 1847.

* The contraction and expansion of iron by heat would render the use of bars of any size in brickwork very inexpedient.—E.G.

A PEEP AT LAHORE.

A RECENT French traveller describes Lahore, of which we have recently heard so much, as being surrounded by high walls and defended by towers and ravines, and gives a graphic picture of its sanitary state and condition. He says, when seen from a distance, no idea can be formed of the spectacle it presents within. Its present misery is as great as its past splendour. It is nothing but a mass of ruins; every where its noble mansions seem ready to fall to the ground. To adventure on foot through the inextricable maze of tortuous, infectious, dark streets, forming the town, obstructed, as they are now, by ruins, and filled with elephants, horses, and men, is almost impossible for a stranger. The streets are so narrow, that in many you may touch both sides as you pass. The houses, constructed of brick, are so high, so overlaid with balconies and occupiers, and in such a state of dilapidation, that a blow would seem sufficient to overturn them, as it would the triumphal gates, under which you pass in going from one quarter of the city to another. To sum up all, the ground, which has never been paved, is a mere open sewer, as horrible to see as to hear; and is pierced here and there by deep holes, which, notwithstanding all the address which is displayed to avoid them, often cause the elephants dangerous falls. We should be glad to obtain the correct average duration of human life in this reeking cesspool, for the advantage of the sanitary agitation now going on in England.

TRUE FIELD FOR SCHOOLS OF DESIGN.

SIR,—I have just read the letter of "A Student," &c., in THE BUILDER of 30th ult., on the much tortured and, it appears, everlasting-to-be-misunderstood question of schools of design. The suggestions contained therein are valuable, and worthy of due consideration, but an idiosyncrasy appears to pervade all one meets with or hears on this subject,—it is the perfecting of a School of Design in London alone. Louis XIV. said, "*L'état—c'est moi*," and the earnest and intelligent advocates of a reform at Somerset House appear to think, that London is Great Britain and Ireland, with dependencies and colonies.

Now, Sir, the question of schools of design out of London,—fixed in the great hives of manufacturing industry, is the national question; and whatever may be done in London, or however excellently things may be conducted in a school adapted to the wants of the metropolis, the "*pons asiurum*," of the matter has still to be got over—the education, adaptation, and productive powers of provincial schools. Even the committee, now or lately sitting, appear to have altogether neglected this point, and the rule of action appears to be,—"*Get a good school in London, and all the rest will follow.*" This of course is anticipated out of the controlling power to be exercised by the authorities of the central school. It may not be amiss, therefore, to name three or four points for the consideration of all parties interested in the matter.

First. How far the provincial schools of design, placed in the numerous centres of varied manufactures, can possibly be efficiently directed from a necessarily limited sphere of observation like London (as regards their positive wants), even with all its advantages, artistic and mercantile.

Second. That some provincial schools have flourished and done their work satisfactorily, so far as regards the wants of the districts in which they were located, whilst the central school was found to be totally inefficient.

Third. That the unreasonable and untimely interference of the authorities of the central school with efficiently managed provincial ones, has resulted in bringing one of the latter at least, and that too the most important one, to the very unsatisfactory level of the former.

Fourth. That whilst affecting to look to France for a high and potent example, the fact has been overlooked, that the French schools are not necessarily controlled in their action by the metropolitan one,* and that the great School of Design of France is not that of Paris, but of Lyons.

Make the London schools what you like,

* See Mr. Forster's Report on the French Schools.

from an infant drawing academy, up to a university of industrial art; train all the masters and teachers, directors and professors, you may require; drill them by searching examination before making an appointment; but after all, the great field of these operations must be Manchester and Birmingham, Sheffield and Glasgow, Paisley and the Potteries, or any other place in which positive manufacture is carried out by practical men anxiously waiting for artistic excellence. I am, Sir, &c.,
Manchester, Feb. 4. GEO. WALLIS.

KENSINGTON WORKHOUSE COMPETITION.

MR. BUILDER.—Herewith I send you a list of the amounts of tenders for the erection of a new workhouse at Kensington. Much has been said at various times in your paper, respecting the disadvantages arising out of the present mode of competition; a stronger case than the present could not in my opinion be adduced of the necessity of a great alteration in the course pursued both by architects and building committees.

The adopted plan is one of the many sent, in answer to an advertisement limiting the amount to be expended to 9,000*l.*; and it was stated by the architect it could be carried out for 8,700*l.* Tenders were required, and when received they ranged from 14,000*l.* to 18,000*l.* The architect then stated that he had discovered that the person employed to take out the quantities had committed an error, and which occasioned the excess of difference between his statement and the tenders. The board of guardians, at the suggestion of the architect, employed him to take out the quantities anew; his estimate then was 9,800*l.*, and he assured the board that an eminent builder had offered to execute the work for that sum. But what is the result: the tender accepted, although estimated upon the architect's own quantities, is 11,020*l.* Comment is altogether unnecessary; I am content to leave the subject to the consideration of your readers, and remain, Mr. Builder,—Yours truly,
G. H. S.

Cooper and Davies	£12,746
Nicholson	12,442
Jeffries	12,419
I'Anson	12,231
Sisson	12,219
Curtis	12,134
H. W. Cooper	11,912
Higgs	11,326
Trago	11,289
Wilson	10,970
Burton (accepted)	11,020

NEW CORN EXCHANGE, BIRMINGHAM.

It has been determined to erect a new Corn Exchange in Birmingham, immediately behind the St. George's Coach Office, in High-street, between Carr's-lane and Castle-street. The plans have been prepared by Mr. S. Hemming, architect, and the building will consist of a hall, 110 feet long by 40 feet wide, lighted by a semi-circular roof, surmounted by a lantern, extending the whole length of the hall. The room will be about 50 feet in height, and will be divided into side compartments by pilasters, between which stands and tables, intended to be let to farmers and dealers, will be placed. It has a glass roof of semi-circular shape, as the one best suited to admit the greatest quantity of light. According to a local paper, this spacious room will have two doors, one leading from a vestibule, with columns and ornamented ceiling, at the entrance of St. George's-court, in High-street, the other with a still larger vestibule at the Castle-street entrance. A porch, ornamented with pilasters of the Roman Doric order, will form the High-street entrance; that by Castle-street, which will be the principal front, will be enriched with eight columns, and ornamental recesses leading to the vestibule and to the floor beneath, which it is proposed shall be appropriated to the exhibition of agricultural implements. The building is of the Roman Doric order, in cement. The extreme length of the building, including porch, vestibules, and hall, will be 167 feet, the width varying from 37 to 40 feet. The builder is Mr. Briggs, and the cost will be 5,000*l.*, the expense of the land being nearly the same sum.